

PTO/SB/08B (10-01)


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Substitute for form 1449B/PTO		Compl to If Kn wn	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Application Number	09/724,953
		Filing Date	November 28, 2000
		First Named Inventor	Dale B. Schenk
		Art Unit	1647
		Examiner Name	Christopher Nichols
		Attorney Docket Number	15270J-005913US
Sheet	8	of	10

252	GEDDES, "N-terminus truncated β -amyloid peptides and C-terminus truncated secreted forms of amyloid precursor protein: distinct roles in the pathogenesis of Alzheimer's disease," <u>Neurobiology of Aging</u> , 20:75-79 (1999).	
251	GARDELLA et al., "Intact Alzheimer amyloid precursor protein (APP) is present in platelet membranes and is encoded by platelet mRNA," <u>Biochem. Biophys. Res. Comm.</u> , 173:1292-1298 (1990).	
249	FRIEDLAND, et al., "Neuroimaging of Vessel Amyloid in Alzheimer's Disease," In <u>Cerebrovascular Pathology in Alzheimer's Disease</u> , eds. de la Torre and Hachinski, New York Academy of Sciences, New York, New York (1997).	
244	FRENKEL, et al., "Modulation of Alzheimer's β -amyloid neurotoxicity by site-directed single chain antibody," <u>J. of Neuroimmunology</u> , 106:23-31 (2000).	
248	FRENKEL et al., "N-terminal EFRH sequence of Alzheimer's β -amyloid peptide represents the epitope of its anti-aggregating antibodies," <u>J. of Neuroimmunology</u> , 88:85-90 (1998).	
247	FRENKEL et al., "Immunization against Alzheimer's β -amyloid plaques via EFRH phage administration," <u>PNAS USA</u> , 97:11455-11459 (2000).	
245	FRENKEL et al., "High affinity binding of monoclonal antibodies to the sequential epitope EFRH of β -amyloid peptide is essential for modulation of fibrillar aggregation," <u>J. of Neuroimmunology</u> , 95:136-142 (1999).	
246	FRENKEL et al., "Generation of auto-antibodies towards Alzheimer's disease vaccination," <u>Vaccine</u> , 19:2615-2619 (2001).	
328	FELSENSTEIN et al., "Transgenic Rat and In-Vitro Studies of β -Amyloid Precursor Protein Processing," <u>Alzheimer's and Parkinson's Diseases</u> , Hanin et al. Ed., pp 401-409, Plenum Press, New York, (1995).	
289	ESIRI, "Is an effective immune intervention for Alzheimer's disease in prospect?," <u>Trends in Pharm. Sci.</u> , 22:2-3 (2001).	
226	Elan, "Elan and Wyeth Provide Update on Status of Alzheimer's Collaboration," Press Release (3/1/2002).	
225	Elan, "Elan and AHP Provide an Update on the Phase 2A Clinical Trial of AN-1792," Press Release. (1/28/2002).	
288	DUMERY et al., " β -Amyloid protein aggregation: its implication in the physiopathology of Alzheimer's disease," <u>Pathol. Biol.</u> , 49:72-85 (2001).	

Examiner Signature		Date Considered	7/11/03
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347	JORBECK et al., "Artificial <i>Salmonella</i> Vaccines: <i>Salmonella typhimurium</i> O-antigen-Specific Oligosaccharide-Protein Conjugates Elicit Opsonizing Antibodies that Enhance Phagocytosis," <i>Infection and Immunity</i> , May:497-502 (1981).	—
334	JOBLING and HOLMES, "Analysis of structure and function of the B subunit of cholera toxin by the use of site-directed mutagenesis," <i>Molecular Microbiology</i> , 5(7):1755-1767 (1991).	—
257	JEN, et al., "Preparation and purification of antisera against different regions or isoforms of b-amyloid precursor protein," <i>Brain Research Protocols</i> , 2:23-30 (1997).	—
308	JANUS, et al. A beta peptide immunization reduces behavioural impairment and plaques in a model of Alzheimer's disease. <i>Nature</i> , 408(6815):979-82 (2000).	—
256	IKEDA, et al., "Immunogold labeling of cerebrovascular and neuritic plaque amyloid fibrils in Alzheimer's disease with an anti- β protein monoclonal antibody," <i>Lab. Invest.</i> , 57:446-449 (1987).	—
236	HILBICH et al., "Human and rodent sequence analogs of Alzheimer's amyloid β A4 share similar properties and can be solubilized in buffers of pH 7.4," <i>Eur. J. Biochem.</i> , 201:61-69 (1991).	—
229	HAZAMA, et al., "Intranasal Immunization Against Herpes Simplex Virus Infection by Using a Recombinant Glycoprotein D Fused With Immunomodulating Proteins, the B Subunit of Escherichia Coli Heat-Labile Enterotoxin and Interleukin-2," <i>Immunology</i> , Vol. 78: 643-649 (1983).	—
255	HARIGAYA, et al., "Modified amyloid β protein ending at 42 or 40 with different solubility accumulates in the brain of Alzheimer's disease," <i>Biochem. Biophys. Res. Comm.</i> , 211:1015-1022 (1995).	—
241	HAASS et al. "Amyloid beta-peptide is produced by cultured cells during normal metabolism," <i>Nature</i> , 359(6393):322-5 (1992).	—
254	GRUBECK-LOEBENSTEIN, et al., "Immunization with β -amyloid: could T-cell activation have a harmful effect?," <i>JINS</i> , 23:114 (2000).	—
237	GORTNER, <i>Outlines of Biochemistry</i> , pp. 322-323, John Wiley & Sons, Inc., New York (1949).	—
303	GONZALES-FERNANDEZ et al., "Low antigen dose favors selection of somatic mutants with hallmarks of antibody affinity maturation," <i>Immunology</i> , 93:149-153 (1998).	—
253	GIULIAN, et al., "The HHQK Domain of b-Amyloid Provides a Structural Basis for the Immunopathology of Alzheimer's Disease," <i>Journal of Biological Chem.</i> , 273:29719-29726 (1998).	—

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311	MORGAN, et al., "A beta peptide vaccination prevents memory loss in an animal model of Alzheimer's disease," <i>Nature</i> , 408(6815):982-5 (2000).
310	MERLUZZI, et al. Humanized antibodies as potential drugs for therapeutic use. <i>Adv Clin Path.</i> 4(2):77-85 (2000).
265	MENA, et al., "Monitoring pathological assembly of tau and β -amyloid proteins in Alzheimer's disease," <i>Acta Neuropathol.</i> , 89:50-56 (1995).
238	MCNEAL et al., "Stimulation of local immunity and protection in mice by intramuscular immunization with triple- or double-layered rotavirus particles and QS-21," <i>Virology</i> , 243:158-166 (1998).
264	MCGEER, et al., "Immunohistochemical localization of beta-amyloid precursor protein sequences in Alzheimer and normal brain tissue by light and electron microscopy," <i>J. of Neuroscience Res.</i> , 31:428-442 (1992).
309	MATTSON, Cellular actions of beta-amyloid precursor protein and its soluble and fibrillogenic derivatives. <i>Physiol Rev.</i> 77(4):1081-132 (1997).
335	MASLIAH et al., " β -Amyloid peptides enhance α -synuclein accumulation and neuronal deficits in a transgenic mouse model linking Alzheimer's disease and Parkinson's disease," <i>PNAS</i> , 98(21):12245-12250 (2001).
262	MANN, et al., "The extent of amyloid deposition in brain in patients with Down's syndrome does not depend upon the apolipoprotein E genotype," <i>Neuroscience Letters</i> , 196:105-108 (1995).
263	MANN, et al., "Amyloid β protein ($A\beta$) deposition in chromosome 14-linked Alzheimer's disease: Predominance of $A\beta_{42(43)}$," <i>Annals of Neurology</i> , 40:149-156 (1996).
261	MAK, et al., "Polyclonals to b-amyloid (1-42) identify most plaque and vascular deposits in Alzheimer cortex, but not striatum," <i>Brain Research</i> , 667:138-142 (1994).
260	LEMERE, et al., "Nasal $A\beta$ treatment induces anti- $A\beta$ antibody production and decreases cerebral amyloid burden in PD-APP mice," <i>Annals of the NY Acad. Sci.</i> , 920:328-331 (2000).
259	LANSBURY, PETER T., "Inhibition of amyloid formation: a strategy to delay the onset of Alzheimer's disease," <i>Curr. Ops. in Chemical Biology</i> , 1:260-267 (1997).
258	KIDA, et al., "Early amyloid- β deposits show different immunoreactivity to the amino- and carboxy-terminal regions of b-peptide in Alzheimer's disease and Down's syndrome brain," <i>Neuroscience Letters</i> , 193:105-108 (1995).

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269	PHILIPPE, et al., "Generation of a monoclonal antibody to the carboxy-terminal domain of tau by immunization with the amino-terminal domain of the amyloid precursor protein," <u>J. of Neuroscience Res.</u> , 46:709-719 (1996).	
232	PETERSON, et al., "Recombinant Antibodies: Alternative Strategies for Developing and Manipulating Murine-Derived Monoclonal Antibodies," <u>Laboratory Animal Science</u> , 46(1):8-14 (1996).	
336	PERUTZ et al., "Amyloid fibers are water-filled nanotubes," <u>PNAS</u> , 99(8):5591-5595 (2002).	
260	PARDRIDGE et al., "Chimeric peptides as a vehicle for peptide pharmaceutical delivery through the blood-brain barrier," <u>Biochem. Biophys. Res. Comm.</u> , 146:307-313 (1987).	
329	NIEMANN, "Transgenic farm animals get off the ground," <u>Transgenic Research</u> 7:73-75 (1998).	
350	Nicoll et al., "Neuropathology of human Alzheimer's disease after immunization with amyloid- β peptide: a case report," <u>Nature Medicine</u> , 9(4):448-452 (April 2003).	
235	NEWCOMBE and COHEN, "Solubility characteristics of isolated amyloid fibrils," <u>Biochim. Biophys. Acta</u> , 104:480-486 (1965).	
281	NAKAYAMA et al., "Histopathological studies of senile plaques and cerebral amyloidosis in cynomolgus monkeys," <u>J. of Med. Primatology</u> , 27:244-252 (1998).	
268	NAKAMURA, et al., "Carboxyl end-specific monoclonal antibodies to amyloid β protein (A β) subtypes (A β 40 and A β 42/43) differentiate Ab in senile plaques and amyloid angiopathy in brains of aged cynomolgus monkeys," <u>Neuroscience Letters</u> , 201:151-154 (1995).	
250	NAKAMURA et al., "Histopathological studies on senile plaques and cerebral amyloid angiopathy in aged cynomolgus monkeys," <u>Exp. Anim.</u> , 43:711-716 (1995).	
354	MUTSCHLER et al., "Drug Actions: Basic Principles and Therapeutic Aspects," (1995) 7, 11-12, <u>medpharm Scientific Publishers</u> , Stuttgart, Germany.	
355	MUNSON ed., "Principles of Pharmacology: Basic Concepts & Clinical Applications," (1995), 47-48, Chapman & Hall, New York, New York.	
359	MUNCH et al., "Potential neurotoxic inflammatory response to A β vaccination in humans," (2002) <u>J. Neural Transm.</u> , 109:1081-1087.	
233	MORRIS, et al., "The Consortium to Establish a registry for Alzheimer's Disease (CERAD)," <u>Neurology</u> , 39:1159-65 (1989).	

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271	ST. GEORGE-HYSLOP, PETER H. and DAVID A. WESTAWAY, "Antibody clears senile plaques," <u>Nature</u> , 40:116-117 (1999).	
316	SOTO, et al. Beta sheet breaker peptides inhibit fibrillogenesis in a rat brain model of amyloidosis: implications for Alzheimer's therapy. <u>Nat Med.</u> 4(7):822-6 (1998).	
319	SMALL, et al. Alzheimer's disease and Abeta toxicity: from top to bottom. <u>Nat Rev Neurosci.</u> 2(8):595-6 (2001).	
337	SKOLNICK and FETROW, "From genes to protein structure and function: novel applications of computational approaches in the genomic era," <u>Trends in Biotech.</u> 18(1):34-39 (2000).	
315	SINHA, et al. Recent advances in the understanding of the processing of APP to beta amyloid peptide. <u>Ann N Y Acad Sci.</u> 920:206-8 (2000).	
314	SIGURDSSON, et al. In vivo reversal of amyloid-beta lesions in rat brain. <u>J Neuropathol Exp Neurol.</u> 59(1):11-17 (2000).	
330	SIGMUND, "Viewpoint: Are Studies in Genetically Altered Mice Out of Control," <u>Arterioscler Thromb Vasc Biol.</u> 20:1425-1429 (2000).	
313	SELKOE, The cell biology of beta-amyloid precursor protein and presenilin in Alzheimer's disease. <u>Trends Cell Biol.</u> 8(11):447-53 (1998).	
270	SCHENK, et al., "β-peptide immunization," <u>Arch. Neurol.</u> , 57:934-936 (2000).	
312	SCHENK, et al. Immunotherapy with beta-amyloid for Alzheimer's disease: a new frontier. <u>DNA Cell Biol.</u> 20(11):679-81 (2001).	
277	SASAKI et al., "Human choroid plexus is an uniquely involved area of the brain in amyloidosis: a histochemical, immunohistochemical and ultrastructural study," <u>Brain Res.</u> , 755:193-201 (1987).	
278	SAITOH, N. and K. IMAI, "Immunological analysis of Alzheimer's disease using anti-β-protein monoclonal antibodies," <u>Sapporo Med. J.</u> , 60:309-320 (1991).	
279	SAITO et al., "Vector-mediated delivery of ¹²⁵ I-labeled β-amyloid peptide Ab ¹⁻⁴⁰ through the blood-brain barrier and binding to Alzheimer disease amyloid of the Aβ ¹⁻⁴⁰ vector complex," <u>PNAS USA</u> , 92:10227-10231 (1995).	
304	RASO, V.A., Grant application # 1 R43 AG15746-04 (non-redacted version), "Immunotherapy of Alzheimer's Disease" (publication date unknown).	

CONSIDERED, DO NOT PRINT.

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CS	349	CHECK, "Battle of the Mind," <u>Nature</u> , 422:370-372 (March 2003).	
CS	350	Nicoll et al., "Neuropathology of human Alzheimer's disease after immunization with amyloid- β peptide: a case report," <u>Nature Medicine</u> , 9(4):448-452 (April 2003).	

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CP	340	2002/0162129 A1	10-31-2002	Lannfelt	
	326	2002/0136716 A1	08-26-2002	Raso	
	325	2001/0102261 A1	08-01-2002	Raso	
	306	6,417,178 B1	07-09-2002	Klunk et al.	
	342	2002/0009445 A1	01-24-2002	Du et al.	
	267	6,294,171 B2	09-25-2001	McMichael	
	234	6,284,221 B1	09-04-2001	Schenk, et al.	
	300	2001/0016053 A1	08-30-2001	McMichael	
	230	6,262,335 B1	07-17-2001	Hslao et al.	
	345	2002/0077288 A1	06-21-2001	Frangione	
	231	6,114,133	09-05-2000	Seubert et al.	
	221	5,989,566	11-23-1999	Cobb et al.	
	346	5,935,927	08-10-1999	Vitek et al.	
	321	5,837,672	11-17-1998	Schenk et al.	
	353	5,824,322	10-20-1998	Balasubramanian	
	357	5,776,468 B1	07-07-1998	Hauser et al.	
	356	5,622,701	04-22-1997	Berg	
	320	5,593,846	01-14-1997	Schenk et al.	
	358	5,583,112 B2	12-10-1996	Kensil et al.	
CP	284	5,231,170	07-27-1993	Averback	

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CP	296	60/294,485	12-08-2000	Holtzman et al.	
	297	60/294,498	12-08-2000	Holtzman et al.	
	305	09/724,842	11-28-2000	Chalfour et al.	
	295	60/184,601	02-24-2000	Holtzman et al.	
	262	60/168,667	12-08-1999	Chalm	
	242	60/168,584	11-29-1999	Chalfour et al.	
	283	09/441,140	11-16-1999	Solomon et al.	
CP	299	60/186,295	06-04-2000	Rasmussen et al.	

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Sheet 2 of 10

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Application Number	09/724,953
Filing Date	November 28, 2000
First Named Inventor	Dale B. Schenk
Art Unit	1647
Examiner Name	Christopher Nichols
Attorney Docket Number	15270J-005913US

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document			Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ²
		Country Code ³	Number ⁴	Kind Code ⁵ (if known)				
C20	352	WO	02/34777	A1	05-02-2002			
	351	WO	02/34878	A2	05-02-2002			
	343	EP	1 172 378	A1	01-16-2002			
	344	WO	01/90182	A2	11-29-2001			
	348	WO	01/77167	A2	10-18-2001			
	294	WO	01/62801	A2	08-30-2001			
	298	WO	01/42306	A2	06-14-2001			
	243	WO	01/39796	A2	06-07-2001			
	341	WO	02/03911	A2	04-07-2001			
	324	WO	00/72870	A1	12-07-2000			
	323	WO	00/72876	A2, A3	12-07-2000			
	322	WO	00/72880	A2, A3	12-07-2000			
	240	WO	00/43039	A1	07-27-2000			
	301	WO	01/62284	A2	03-01-2000			
	331	WO	99/06545	A2	11-02-1999			
	187	EP	783 104	A1	07-09-1997			
	227	WO	95/11008	A2	04-27-1995			

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Sheet 3 of 10

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Application Number	09/724,953
Filing Date	November 28, 2000
First Named Inventor	Dale B. Schenk
Art Unit	1647
Examiner Name	Christopher Nichols
Attorney Docket Number	15270J-005913US

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
EN	290	YOUNKIN, "Amyloid β vaccination: reduced plaques and improved cognition," <u>Nature Medicine</u> , 7:18-19 (2001).	
	292	YAMAGUCHI et al., Diffuse plaques associated with astroglial amyloid β protein, possibly showing a disappearing stage of senile plaques," <u>Acta Neuropathol.</u> , 95:217-222 (1998).	
	275	WU, et al., "Drug targeting of a peptide radiopharmaceutical through the primate blood-brain barrier in vivo with a monoclonal antibody to the human insulin receptor," <u>J. Clin. Invest.</u> , 100:1804-1812 (1997).	
	223	WISCONSIN ALUMNI RESEARCH FOUNDATION, "Injection of Newborn Mice with Seven Chemical Adjuvants to Help Determine Their Safety in Use in Biologicals", U.S. Govt. Res. Develop. Rep., 70(24), 56. (Publication date unknown.)	
	274	WEINER et al., "Nasal administration of amyloid- β peptide decreases cerebral amyloid burden in a mouse model of Alzheimer's disease," <u>Annals of Neurology</u> , 48:567-579 (2000).	
	317	VEHMAS, et al. beta-Amyloid peptide vaccination results in marked changes in serum and brain Abeta levels in APPsw/PS1 DeltaE9 mice, as detected by SELDI-TOF-based ProteinChip® technology. <u>DNA Cell Biol.</u> (11):713-21 (2001).	
	276	TJERNBERG et al., "Arrest of β -amyloid fibril formation by a pentapeptide ligand," <u>Journal of Biological Chemistry</u> , 271:8545-8548 (1996).	
	273	THORSETT, E.D. and L.H. LATIMER, "Therapeutic approaches to Alzheimer's disease," <u>Curr. Op. in Chem. Biology</u> , 4:377-382 (2000).	
	339	TENNENT et al., "Serum amyloid P component prevents proteolysis of the amyloid fibrils of Alzheimer's disease and systemic amyloidosis," <u>PNAS</u> , 92:4299-4303 (1995).	
	272	SZENDREI, et al., "The effects of aspartic acid-bond isomerization on in vitro properties of the amyloid β -peptide as modeled with N-terminal decapeptide fragments," <u>Int. J. Peptide Protein Res.</u> , 47:289-296 (1996).	
EN	338	STEIN and JOHNSON, "Lack of Neurodegeneration in Transgenic Mice Overexpressing Mutant Amyloid Precursor Protein is Associated with Increased Levels of Transthyretin and Activation of Cell Survival Pathways," <u>The Journal of Neuroscience</u> , 22(17):7380-7386 (September 1, 2002).	

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Sheet 10 of 10

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Application Number	09/724,953
Filing Date	November 28, 2000
First Named Inventor	Dale B. Schenk
Art Unit	1647
Examiner Name	Christopher Nichols
Attorney Docket Number	15270J-005913US

224	Center for Biologics Evaluation and Research, U.S. Food and Drug Administration, Thimerosal in Vaccines (Mercury in Plasma-Derived Products), web site contents found at: http://www.fda.gov/cber/vaccine/thimerosal.htm, last updated May 16, 2002.
285	CAPUTO et al., "Therapeutic approaches targeted at the amyloid proteins in Alzheimer's disease," <i>Clin. Neuropharm.</i> , 15:414A-414B (1992).
327	CAMERON, "Recent Advances in Transgenic Technology," <i>Molecular Biotechnology</i> , 7:253-265 (1997).
239	BEASLEY, "Alzheimer's traced to proteins caused by aging," Reuters, April 20, 2001 7:56 PM ET.
228	BARROW, et al., "Solution Conformations and aggregational Properties of Synthetic Amyloid Beta-Peptides of Alzheimer's Disease. Analysis of Circular Dichroism Spectra" <i>J. Mol. Biol.</i> , 225(4): 1075-1093 (1992).

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